#### **Board of Governors of the Federal Reserve System**

# REPORT ON THE AUDIT OF BOARD OVERSIGHT OF FEDERAL RESERVE AUTOMATION CONSOLIDATION



## **OFFICE OF INSPECTOR GENERAL**

(A9405) February 1996

The Honorable Edward W. Kelley Chairman Committee on Federal Reserve Bank Activities

We are pleased to present our final *Report on the Audit of Board Oversight of Federal Reserve Automation Consolidation* (A9405). Overall, we believe the Board provided effective organizational leadership and direction when automation consolidation was initiated and successfully used its formal and informal processes to identify issues and influence actions. We provide an analysis of the consolidation effort and make three recommendations designed to strengthen the Board's continuing oversight of automation consolidation activities. The thrust of these recommendations can be used by the Board to improve its oversight of other Systemwide projects as well. Although the Director of the Division of Reserve Bank Operations and Payment Systems disagrees with some aspects of our description of the consolidation effort, he agrees with the intent of our recommendations. We believe that the actions he describes that are underway or planned are responsive to the thrust of our recommendations. We will evaluate these actions and report to you as part of our audit report follow up.

We are sending a copy of this report to each member of the Board and selected staff. Copies of this report are available to the public, and a summary will appear in our next semiannual report to the Congress.

Sincerely,

Brent L Bowen Inspector General

Enclosure

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#### **EXECUTIVE SUMMARY**

#### **Background**

In 1991, the Federal Reserve initiated a multiyear effort to consolidate the mainframe computer data processing of its twelve Reserve Banks at three new, interconnected processing centers managed by a newly-created Federal Reserve Automation Services (FRAS) organization. The Federal Reserve expected automation consolidation to improve control over payment systems risk and improve the reliability, security, business responsiveness, and efficiency of the automation systems that support Reserve Bank operations. The Federal Reserve also expected automation consolidation to be completed in such a way as to minimize any disruptions to the nation's payment systems, provide a relatively rapid transition to the new processing environment, and minimize transition costs. Reserve Banks managed components of the consolidation effort under existing and new management structures (see page 12) with oversight provided by the Division of Reserve Bank Operations and Payment Systems (RBOPS) and the Board's Committee on Federal Reserve Bank Activities (BAC). To achieve its objectives, FRAS established an interim goal and transition model to develop single, standardized versions of six top financial service applications to be operational by the end of 1994. Also by that time, Reserve Banks were to transfer the processing of their remaining "district unique" (DU) mainframe applications to the centralized sites, eliminate their mainframe computers, and reduce related software and staffing. FRAS also envisioned standardizing more applications and exploiting new automation tools and technologies to reach a "mature" consolidation model about two years later.

Thus far, the Reserve Banks have succeeded in creating the centralized data processing centers, transferring nearly all of their mainframe processing, and implementing four of the six standardized software applications. This is a sizeable accomplishment. However, the timeliness and cost of consolidation have been adversely affected by delays in developing the central application software and the decision in late 1993 to simplify the DU processing environment. These two conditions have caused completion of the interim model to be pushed back about two years and Reserve Banks to begin some mature-model tasks. The result is that over the 1994 to 1999 period, mainframe data processing costs and staffing levels are projected to be about 17 and 18 percent higher than anticipated, respectively; thereby, delaying the anticipated realization of net cost savings from consolidation until sometime after 1999. The higher-than-expected costs concern the Reserve Banks and the Board of

<sup>&</sup>lt;sup>1</sup>The initial six applications to be standardized were Funds, Automated Clearing House (ACH), Book Entry Securities (Securities), Daylight Overdraft Reporting and Pricing System (DORPS), Billing, and the Integrated Accounting System (IAS).

Governors of the Federal Reserve System (Board) in part because about half of these costs are allocated to priced financial services. Under the Monetary Control Act, the Federal Reserve must price to cover costs over the long run. As a result, there has been an ongoing effort to reevaluate functionality requirements and to improve the use of FRAS processing capacity.

#### **Audit Purpose**

Our overall audit objective was to evaluate the adequacy of the Board's oversight of automation consolidation. We focused on identifying any changes in oversight approach or emphasis that might be needed during the remainder of the effort to help ensure a successful outcome. We assessed Board oversight from two perspectives: the effectiveness of organizational direction and leadership, and the effectiveness of monitoring and intervention.

#### **Findings and Recommendations**

In summary, we found that the Reserve Banks have made substantial progress in implementing a complicated restructuring of their automation environment and that the Board's oversight actions have clearly contributed to the success of consolidation tasks completed to date. Specifically, the Board provided effective organizational leadership and direction when automation consolidation was initiated by providing its views on the need for, and objectives of, the consolidation effort; reaching agreement with Reserve Banks on a management structure for FRAS; proposing a conceptual consolidation design for Reserve Bank consideration; and working with FRAS and Reserve Bank staff to ensure appropriate site designs, plans, and employee incentives. The Board also used its formal budget, acquisition, and operations review processes to identify issues and influence actions by FRAS and individual Reserve Banks. By participating in Reserve Bank management and oversight committees, Board officials have also been able to monitor progress and informally help the System work through the substantial changes in organizational relationships and dynamics caused by a System approach to automation and financial services.

As the consolidation effort goes forward, we believe that the Board can strengthen its oversight of automation consolidation activities and, in so doing, be better prepared to oversee any other Systemwide, multiyear initiatives. We make three recommendations.

First, we recommend that the Board direct the Reserve Banks to establish accountability and responsibility for managing the completion of all remaining automation consolidation tasks. Automation consolidation was implemented under a

fragmented management structure that has had difficulty in managing the interdependencies of the various interim-model activities. These difficulties were highlighted by delays in the centralized application development efforts and the steps taken to simplify the DU environment. In late 1994, Reserve Banks, with the Board's support, implemented a new financial services management structure that will provide policy and management direction over the Reserve Banks' financial service lines of business and the Reserve Banks' data processing and communication systems, including FRAS. We view this as an important step in the right direction. However, we believe that the continued presence of the automation consolidation steering committee for FRAS and the absence of an updated Board-approved transition plan make it unclear (1) whether automation consolidation continues to exist as a definable, separate initiative and (2) who is responsible and accountable for achieving cost, schedule, and functionality objectives.

Second, we recommend that the Board regularly receive formal, executive-level information on automation consolidation and other System automation activities. In our judgment, the Board has not had sufficient, formal, executive-level information concerning automation consolidation to effectively monitor, and possibly intervene in, an initiative of this magnitude. We found that information on total projected costs, expenditures to date, project accomplishments, schedule delays, functionality changes since project approval, and critical path implementation interdependencies was available, but the presentation of this information was often informal and fragmented. Third, we recommend that the Board require RBOPS to develop more formal oversight processes for analyzing and reporting on multiyear, Systemwide activities such as automation consolidation. We found that RBOPS's formal oversight processes were focused on annual activities of specific Federal Reserve entities rather than on the multiyear, project-wide or Systemwide automation initiatives. While this approach resulted in positive changes to the consolidation effort, we believe it did not always result in a full and clear written presentation of System issues to the Board. We further believe that accountability for System projects, strategic issues, and Board decision making could be improved if the traditional communication methods and protocols were changed to require RBOPS to assess in writing the risks and rewards of Systemwide projects and strategic issues that System staff would present directly to the BAC and or the Board.

#### **Analysis of Comments**

We provided a draft copy of this report to the RBOPS director for his review and comment. The director's response is included as appendix 1. The director believes that we have overstated the impact of organizational deficiencies on consolidation delays and cost. He also believes that the division has provided relevant and timely information to the Board and the BAC on significant developments and that such

briefings reflected the independent views of Board staff. Nevertheless, the director agrees with the intent of our recommendations. He notes that the System is moving to formally integrate FRAS's reporting relationship with the new financial services management structure (FSMS) and that the division intends to review automation consolidation planning in the broader context of the FSMS's new Strategic Plan for Information Technology. The director also states that the division is planning to reinstate periodic BAC briefings on the status of System automation activities and will review its processes for monitoring and reporting on multiyear, Systemwide projects. We believe that the actions underway and planned are responsive to the thrust of our recommendations and will evaluate these actions as part of our audit report follow up.